

Probability Theory and Mathematical Statistics

POL/2129

6.2. Stochastic convergence	159
6.3. Law of large numbers for Bernoulli trials	161
6.4. Convergence of the sequence of distribution functions	162
6.5. Stieltjes integral	164
6.6. Levy-Cramer theorem	164
6.7. De Moivre - Laplace theorem	172
6.8. Lindeberg - Levy theorem	176
6.9. Lyapunov theorem	182
6.10. Local limit theorem	191
6.11. The law of larger numbers of Poisson, Chebyshev, and Khinchin	197
6.12. The strong law of large numbers	201
6.13. Multidimensional limit distributions	209
6.14. Limit theorems for measurable functions of certain random variables	212
Ch. 7. Markov Chains	
7.1. Introductory remarks	216
7.2. Homogeneous Markov chains	216
7.3. Transition matrix	217
7.4. Ergodic theorem	221
7.5. Random variables connected in a homogeneous Markov chain	230

Card 6/12

Probability Theory and Mathematical Statistics

POL/2129

Ch. 8. Stochastic Processes

8.1. The concept of a stochastic process	235
8.2. Markov processes and processes with independent increments	236
8.3. Poisson process	240
8.4. Furry-Yule process	245
8.5. Birth and death process	251
8.6. Polya process	262
8.7. Kolmogorov equations	264
8.8. Pure discontinuous processes and pure continuous processes	267
8.9. Normal process with independent increments	271
8.10. Stationary processes	276
8.11. Final remarks	279

PART II. MATHEMATICAL STATISTICS

Ch. 9. Moments From the Sample and Their Functions

9.1. Concept of the sample	281
9.2. Concept of the statistic	283
9.3. Distribution of mean arithmetic of independent normal variables	283
9.4. χ^2 distribution	285

Card 7/12

Probability Theory and Mathematical Statistics

POL/2129

9.5. Joint distribution of \bar{X} and S statistics	288
9.6. Student's t distribution	293
9.7. Fisher's distribution Z	298
9.8. Distribution \bar{X} from certain nonnormal population samples	300
9.9. Distribution of moments and of the correlation coefficient from a normal population sample	302
9.10. Distribution of regression coefficients	306
9.11. Limit distributions of moments from the sample	310
Ch. 10. Distribution of Position Statistics	
10.1. Introductory remarks	313
10.2. Position statistics	313
10.3. Empirical distribution	315
10.4. Stochastic convergence of a quantile sequence from a sample	319
10.5. Limit distribution of a quantile from a sample	320
10.6. Limit distribution of a successive element from a sample	326
10.7. Joint distribution of the group of quantiles	328
10.8. Distribution of a range from the sample	329
10.9. Tolerance limits	329
10.10. The Glivenko theorem	331
10.11. Kolmogorov's and Smirnov's theorems	335
10.12. The Renyi theorem	344

Card 8/12

Probability Theory and Mathematical Statistics

POL/2129

10.13. Problem of k samples	345
Ch. 11. Outline of the Theory of Series	
11.1. Introductory remarks	349
11.2. The concept of a series	349
11.3. Distribution of the number of series	350
11.4. Mean value and variance of the number of series	355
Ch. 12. Tests of Significance	
12.1. The concept of a statistical test	358
12.2. Parametric tests in small samples	360
12.3. Parametric tests in large samples	365
12.4. Test of the goodness of fit. χ^2 test	368
12.5. Tests of the goodness of fit of λ based on Kolmogorov's and Smirnov's theorems	376
12.6. Test of the goodness of fit based on the theory of series	381
12.7. Independence tests in manifold tables [classification]	382
Ch. 13. The Theory of Estimation	
13.1. Introductory concepts	386
13.2. Consistent estimates (estimators)	386
Card 9/12	

Probability Theory and Mathematical Statistics

POL/2129

13.3. Unbiased estimates	387
13.4. Sufficiency of an estimate	389
13.5. The most efficient estimates	391
13.6. Asymptotically most efficient estimates	401
13.7. Methods for obtaining estimates	406
13.8. Confidence limits	411
13.9. Bayes' theorem and estimation	415
Ch. 14. Methods and Schemes of Random Trials	
14.1. Introductory remarks	420
14.2. Methods of random trials	421
14.3. Schemes of dependent and independent random trials	426
14.4. Schemes of unrestricted random trials and of stratified random trials	429
14.5. Random measurement errors	436
Ch. 15. Outlines of the Analysis of Variance	
15.1. Classification with respect to single criterion	439
15.2. Classification with respect to multiple criteria	407
15.3. Modified regression problem	451

Card:10/12

Probability Theory and Mathematical Statistics

POL/2129

Ch. 16. General Theory of Tests	455
16.1. Introductory remarks	455
16.2. Power of a test and OC[operational-characteristic] function	464
16.3. The most powerful test	469
16.4. Uniformly most powerful test	471
16.5. Unbiased tests	477
16.6. Closing remarks	
Ch. 17. Elements of Sequential Analysis	478
17.1. Introductory remarks	479
17.2. Sequential ratio test	482
17.3. Auxiliary theorem	485
17.4. Fundamental identity	487
17.5. OC function of a sequential ratio test	489
17.6. Mean value $E(n)$	491
17.7. Determination of A and B numbers	
17.8. Verification of the hypothesis concerning the value of parameter p in zero-unit distribution	491
17.9. Verification of the hypothesis concerning mean value in the population with normal distribution	499
Card 11/12	

Probability Theory and Mathematical Statistics

POL/2129

17.10. Closing remarks

503

Tables

504

References

512

Index

521

AVAILABLE: Library of Congress

Card 12/12

LK/mg
11-4-59

FISZ, M. (Warsaw)

Some non-parametric tests for the k-sample problem. Col math 7
no.2:289-296 '60. (EEAI 10:1)

1. Mathematical Institute of the Polish Academy of Sciences.
(Sampling (Statistics))
(Distribution (Probability theory))

FISZ, M.

Remarks on the sample functions of some stochastic processes. Bul
Ac Pol mat 8 no.6:355-358 '60. (EEAI 10:6)

1. Institute of Mathematics, Polish Academy of Sciences. Presented
by H.Steinhaus.
(Probabilities) (Functions) (Continuity)

EHRENFEUCHT, A.; FISZ, M.

A necessary and sufficient condition for the validity of the weak law of large numbers. Bul Ac Pol mat 8 no.9:583-585. '60.

1. Institute of Mathematics, Polish Academy of Sciences. Presented by E. Marczewski.

(Numbers, Theory of)

FISZDON, Wladyslaw

FISZDON, Wladyslaw: O pewnej metodzie obliczania amplitud drgan wymuszonych
(A Certain Method of Calculation of the Amplitude of Constrained Vibrations).
Warsaw: State Scientific Publications, 1954. 9 pages. Contains resume,
summary, bibliography. Published from the PAN Research Laboratory of
Mechanics of Continuous Media. Price 4 zl. (First Published in Rozprawy
Inzynierskie, Vol. I, No. 9).

V3313. Elzdon, W., The use of the admittance method in calculating forced aircraft vibration amplitudes, taking into account internal damping (in Polish), *Arch. Bud. maszyn* 1, 2, 123-104, 1954. MN

POL..

The concept of the admittance method introduced by Carter as dynamic flexibility is better known now as the receptance method. The main advantage of the receptance method is that it permits complicated systems to be broken down into simpler parts. Until now the practical possibilities of the method have not been thoroughly explored. Mr. Elzdon extends the method to complex systems with internal damping.

In the first part he introduces the receptance by developing elementary vibration formulas. (The same results could be obtained by substituting $1/q$ where q is receptance, instead of K for stiffness in well-known formulas.) Later he derives receptance formulas for flexible beams (for bending and torsion), assuming that internal damping is proportional to the velocity of the deformation; further, for a body suspended on four springs with damping, he calculates receptance of a complex system from the receptance of known elements.

With examples for various damping (0.025 to 0.3 of critical) of a flexible three-mass system (aircraft frame), he shows the influence of damping on forced vibration in this particular case. Aircraft vibrations can be reduced by larger damping in the frame and an engine suspension system which is softer and has larger internal damping.

This interesting study of theoretical and practical importance is concluded with a calculation of approximate receptance in complex cases by Galerkin and Lagrange methods.

A. L. Nasvytis, USA

FISZDON, Wladyslaw

A method of calculating the flow in a divergent nozzle with oscillating walls. Archiw mech 14 no.3/4:641-649 '62.

1. Division de Mecanique des Fluides, Institute des Problemes
Fondamentals Techniques, Academie Polonaise des Sciences, Varsovie.

MISZTAL, F., prof. dr inż.; FISZDON, W., prof. dr inż.

The eightieth anniversary of the birth of Professor Bohdan Stefanowski. Archiw bud masz 10 no. 3: 215-218 '63.

1. Sekretarz Wydziału IV, Polska Akademia Nauk, Warszawa (for Misztal).
2. Dziekan Wydziału Mechanicznego Energetyki i Lotnictwa, Politechnika, Warszawa (for Fiszdon).

ENT(1)/BWP(m)/EWT(m)/T/PCS(k)/EWA(h) Pd-1/P1-4 AWDG(a)/SSD/SSD(b)/
 BSD/APWL/ASD(f)-3/ASD(p)-3/AFETR RM
 P/1033/64/016/102/0.37/241

AUTHOR: Fleczdon, W. (Warsaw)

TITLE: A simple qualitative estimate of the effect of oscillating pressure on the shape of a detached shock wave B

SOURCE: Archiwum mechaniki stosowanej, v. 16, no. 2, 1964, 237-241

TOPIC TAGS: qualitative estimate, effect, oscillating pressure, shock wave, detached shock wave, waveform

ABSTRACT: An attempt was made theoretically to estimate the effect of oscillating pressure at the surface of a simple blunt body on the oscillatory displacement of the shock wave. The simplified case of hypersonic Newtonian stationary flow in the stagnation region close to the axis of symmetry was considered. Formulas were derived for estimating the nondimensional time delay t , required for a pressure disturbance on the body to reach the shock wave for two cases: that of plane flow over a circular section with pressure oscillations on the body surface being of the same amplitude and phase (also, the pulsations propagate radially for small angles θ , where θ is the

Card 1/3

L 19667-65

ACCESSION NR: AP4048999

angle between the normal to the shock wave and the direction of (infinite flow) and of the three-dimensional flow over a blunt body. The assumptions of the plane case. Then, the time delays taken by a pressure pulsation to arrive at two positions given by θ_1 and θ_2 can be calculated. The results were illustrated by a calculation of the frequency of pressure oscillations between $\theta_1 = 0^\circ$ and $\theta_2 = 15^\circ$. It is shown that the conditions needed to produce a change of sign are met, especially in the case of plane flow, and increase very slowly at higher Mach numbers, but drop rapidly at lower Mach numbers. Recommended lines for further investigation are: study of lower velocities with assumptions giving closer approximations to real flow conditions in front of a blunt body, use of numerical methods in the above oscillatory cases, and study of the effect of oscillations on the subsonic region behind the shock wave on the supersonic region. Work in this field is being continued. Orig. art. has: 3 figures.

ASSOCIATION: Department of Fluids, IBTP, Polish Academy of Sciences

Card 2/3

L 19667-65

ACCESSION NR: AP4048999

0

SUBMITTED: 00

ENCL: 00

SUB CODE: ME

NO REF SOV: 000

OTHER: 003

Card 3/3

FISZER, A.

Two decades. p. 434, (WIEDZA I ZYCIE, Vol. 21, No. 7, July 1954,
Warszawa, Poland)

SO: Monthly List of East European Accessions, (EEAL), LC, Vol. 4, No. 5
May 1955, Uncl.

FISZDON, W.

A simple qualitative estimation of the effect of oscillating pressure on the detached shock-wave shape. Archiw mech 16 no.2:237-241 '64.

1. Department of Liquids and Gases, Institute of Basic Technical Problems, Polish Academy of Sciences, Warsaw.

FISZER, B.

Chemical Abst.
Vol. 48 No. 9
May 10, 1954
Organic Chemistry

*B. Fiszer and J. Michalski (Politech. Lodz, Poland). Roczniki Chem. 25, 514-15 (1951) (English summary).—*Tetraalkyl thio-
pyrophosphates of the thioanhydride type were prepd.: (A) by condensation of the corresponding dialkyl chlorophosphonates with salts of dialkyl thiophosphoric acids according to $(RO)_2P(O)SNa + Cl(O)P(OR)_2 \rightarrow (RO)_2P(O)S(O)P(OR)_2 + NaCl$, and (B) by action of H_2S on dialkyl chlorophosphonates in the presence of a tertiary base (e.g. C_2H_5N) according to $2(RO)_2P(O)Cl + H_2S + 2C_2H_5N \rightarrow (RO)_2P(O)S(O)P(OR)_2 + 2C_2H_5N.HCl$. The following thio-
pyrophosphates were prepd.: tetra-Et, $b.p.$ 120-2°, (74%), tetra-*iso*-Pr, $b.p.$ 82-4° (66%), tetra-Bu, $b.p.$ 112-14° (72%), and tetra-*iso*-Bu, $b.p.$ 96-8° (72%). G. A. W.

"APPROVED FOR RELEASE: 06/13/2000

CIA-RDP86-00513R000413310018-0

Page 13.

APPROVED FOR RELEASE: 06/13/2000

CIA-RDP86-00513R000413310018-0"

"APPROVED FOR RELEASE: 06/13/2000

CIA-RDP86-00513R000413310018-0

[Faint, illegible text]

APPROVED FOR RELEASE: 06/13/2000

CIA-RDP86-00513R000413310018-0"

POL.

3160

547.241-123: 613.9: 577.153.623.3

Flizer D., Michalski J., Wlaczorkowski J. Organophosphorus Compounds of Sulphur and Selenium. I. Synthesis of Tetraalkylthiopyrophosphates.

"Fosfororganiczne pochodne siarki i seleniu. I. Syntezy tiopiroforanów czterociekłowych". Roczniki Chemii (PAN), No. 4, 1953, pp. 462-483.

Two methods of preparation of tetraalkylthiopyrophosphates $(RO)_4P_2S_2(OR')_2$ are described: 1) by condensation of the salts of O,O-dialkylthiophosphoric acids with dialkylchlorophosphates; 2) by action of hydrogen sulphide on dialkylchlorophosphates in the presence of tertiary amines. Tests were made of the toxicity of the compounds obtained and of their anticholinesterase activity.

11

2

Jan

FISZER, B.

POL.

Organophosphorus compounds of sulfur and selenium. I.
Synthesis of tetraalkyl thiopyrophosphates. Polish
ter. Jan Michalski, and Jan Wiczkowski (Politech.
Lodz, Poland). Roczniki Chem. 27, 482-83 (1953) [English
summary].—Tetraalkyl thiopyrophosphates, (RO)₂P(O)₂
SP(O)(OR')₂, may be prepd. by: (1).—condensation of Na
O,O-dialkylthiophosphates with dialkyl chlorophosphates or
(2).—action of H₂S on dialkyl chlorophosphates in the pre-
sence of tertiary amines. Toxicity and anticholinesterase
activity of the products were studied. Dialkyl chloro-
phosphates were prepd. using the method described pre-
viously (cf. C.A. 49, 2306c). Na O,O-dialkylthiophosphates
were obtained by adding 0.25 mole powd. S in small por-
tions with stirring and outside cooling to a mixt. of 0.2
mole Na dissolved in 60 ml. dry ROH and 0.21 mole dialkyl
phosphite in 30 ml. dry Et₂O. Stirring was continued after
all the S was added until the mixt. warmed up to room
temp. The excess S was filtered and the filtrate was evapd.
under reduced pressure at room temp. The cryst. product
was washed 3 times with Et₂O and evapd. each time.
Di-Et phosphite gave 98% yield (based on Na) crude (EtO)₂P(O)
P(O)SNa (I), m. 188° [m. 203° (from CHCl₃-Et₂O)].
Crude I was used in further syntheses. (EtO)₂POCl (II).
(21.5 g.) (0.125 mole) added dropwise with vigorous stirring
to a refluxing mixt. of 24 g. (0.125 mole) powd. dry I and
120 ml. anhyd. Et₂O, refluxed for 30 min., dild. with 100 ml.
CH₂Cl₂, washed successively with: 100 ml. water contg. a few
drops pyridine, 50 ml. 1% HCl, 50 ml. water, 50 ml. 5%
NaHCO₃, and 50 ml. water, dried with Na₂SO₄ and distd.
twice gave 20 g. (65%) (EtO)₂P(O)SP(O)(OEt)₂ (III), b.p.
120-2°/2 mm., n_D²⁰ = 1.1855, n_D²⁵ = 1.1490. Similarly, (MeO)₂

BERNARD FISZER

$P(O)Na$ (IV) and $(MeO)_2POCl$ gave 21% $(MeO)_2P(O)ST$ ($O(O)Me$) (V), yellow liquid, b. 128-30° (decompos. slightly), b_m 68-6° (bath at 100°), d_4 = 1.3340, n_D^{20} = 1.4519. IV and II gave 50% $(MeO)_2P(O)SP(O)OEt$ (VI), colorless liquid, b_m 116°, d_4 = 1.2530, n_D^{20} = 1.4139. I and $(BuO)_2POCl$ gave 57 g. crude product which in a mol. distn. (at 0.001 mm., condenser at 20 mm. from liquid surface, distg. at 5 drops/min.) gave the following fractions: (1).—0 g., temp. of liquid 50-88°, n_D^{20} = 1.4393; (2).—13.5 g., temp. of liquid 83°, n_D^{20} = 1.4471, 16.8% P (calcd. for $(BuO)_2P(O)SP(O)OEt$), 17.1% P; (3).—27.5 g., temp. of liquid 97°, n_D^{20} = 1.4415, 14.5% P; (4).—2.5 g., temp. of liquid 117°, n_D^{20} = 1.4340. I and $(PrO)_2POCl$ (VII) gave 77% $(PrO)_2P(O)SP(O)OEt$, colorless liquid, b_m 103.5°, d_4 = 1.1347, n_D^{20} = 1.4429. II (34.5 g., 0.2 mole) was added dropwise with stirring at 10-15° to 70 ml. dry pyridine and a strong stream of H_2S was passed through the stirred and cooled mixt. for 90 min. The pptd. $C_4H_9N.HCl$ was filtered and washed twice with 75 ml. C_4H_9 . The combined filtrates were distd. under reduced pressure and the residue taken up in 100 ml. C_4H_9 , washed successively with 30 ml. 2% HCl , 30 ml. water, 30 ml. 5% $NaHCO_3$, and 30 ml. water, dried with Na_2SO_4 , and distd. twice gave 23 g. (74%) III, b_m 82-4°. An 85% yield of III was obtained when *N*-methylmorpholine (dild. with C_4H_9) was used instead of pyridine. Similarly, VII and H_2S in pyridine gave 67% $(PrO)_2P(O)SP(O)OEt$ (VIII), colorless liquid, b_m 94-5°, d_4 = 1.1075, n_D^{20} = 1.4363; (iso- PrO) $_2POCl$ gave 70% (iso- PrO) $_2P(O)SP(O)OPr$ (IX), colorless liquid, b_m 82-4°, d_4 = 1.0885, n_D^{20} = 1.4370; $(BuO)_2POCl$ gave 73% $(BuO)_2P(O)SP(O)OBu$ (X), yellow liquid, b_m 112-14°, d_4 = 1.0374, n_D^{20} = 1.4517; (iso- BuO) $_2POCl$ gave 72%

2/3

BERNARD FISZER

($\text{HO-CH}_2\text{O}$) $\text{P}(\text{O})\text{SPO}(\text{OCH}_2\text{CH}_3)_2$ (II), colorless liquid, $b_p = 93-94^\circ$, $d_4^{20} = 1.0489$, $n_D^{20} = 1.4463$; (MeO) $\text{P}(\text{O})\text{Cl}$ (below 5°) gave a sticky, malodorous liquid, insol. in org. solvents, sol. in water. Et $_3\text{N}$ (0.25 mole) added dropwise to 0.2 mole di-Et phosphite and 0.6 mole CCl_4 and treated with Et $_3\text{S}$ with stirring at $5-10^\circ$ for 3 hrs. gave 85% III. All boiling points are uncor. Tetraalkyl thiopyrophosphates are insecticides. The following doses (in g./kg. wt. of animal) were fatal to mice and rats when injected intramuscularly: III, 0.000655; V and X, 0.00025; VI, 0.001; VIII, 0.0025; IX and XI, 0.05. All compds. stopped cholinesterase activity in rat brain, III being the most active and approaching parathion in effectiveness. J. R. Sencer

FISZ, ER, BERNARD

POL. :

Synthesis of α,β -unsaturated compounds, based on phosphonoacetic ester and its analogs. Addition of phosphonoacetic ester, alkylated phosphonoacetic ester, and phosphonoacetic nitrile to α,β -unsaturated esters and nitriles. Reaction of ester and imide Michael (Higher Polytech. School, 1932, 1934). *Reaction Chem.* 28, 184-90 (1954) (English summary). -- (EtO)₂P(O)CH₂CO₂Et (I), (EtO)₂P(O)CH₂CO₂CH₃ (II), and alkylated I (III) in the presence of alk. catalysts undergo Michael condensation with α,β -unsatd. esters and nitriles at 20-80° in C₆H₆ or PhMe (less satisfactory results are obtained in alc. soln.). III are less reactive than I or II while the order of decreasing reactivity of α,β -unsatd. compounds (IV) is: acrylates > crotonates, methacrylates > PhCH=CHCO₂Et (VI). Condensation of active reagents (e.g., I with CH₂=CHCN (VI) or CH₂=CHCO₂Me (VII)) is exothermic, requires small amts. of catalyst, and yields a mixt. of mono- and di-substituted derivs. Condensation of a reactive P compd. with less reactive IV requires heating, more catalyst and can be stopped at the first stage, while the poorly reactive compounds do not condense even under drastic conditions due to steric hindrance. A mechanism of condensation is given. To 23 g. Na finely dispersed in 400 ml. dry xylene was added with cooling and stirring (Hg-sealed stirrer) 138 g. HP(O)(OEt)₂ (VIII), followed by 150 g. ClCH₂CO₂Et (IX), the mixt. heated 3 hrs. on the bath at 60°, NaCl centrifuged off, the xylene removed, and the residue distd.

10-24

on a 10% fluoron column, 10% silica column, yielding 150 g. $(EtO)_2P(O)CH_2CO_2Et$ (XI), b_p 137-4°, n_D^{20} 1.4307 (all bps. and m.p.s. uncor.). X was added with stirring (vigorous stirring) to a mixt. of 15 g. X in 200 ml. xylene. (exothermic reaction), the mixt. cooled and to it was added 47 g. $BuBr$, the ppt. filtered off, the filtrate washed with 1% HCl , H_2O , 5% $NaHCO_3$, and H_2O , the xylene layer dried over CaH_2 , the xylene removed, and the residue distd. as above, yielding 62 g. $(EtO)_2P(O)CHBuCO_2Et$ (XII), b_p 121-2°, n_D^{20} 1.4365. $P(OEt)_3$ (XIII) (49 g.) and 54 g. $EtCHBrCO_2Et$ were refluxed 4 hrs. on the oil bath at 165° and the mixt. was distd. as above, yielding 52 g. $(EtO)_2P(O)CHBrCO_2Et$, b_p 152-4°, n_D^{20} 1.4290. To the suspension of 9.2 g. Na in 200 ml. xylene was added 55.2 g. VIII, followed by 50 g. $MeCHBrCO_2Et$, the mixt. refluxed 3 hrs. at 60°, the ppt. filtered off, and the reaction product worked up as above, yielding 55 g. $(EtO)_2P(O)CHMeCO_2Et$, b_p 150-1°, n_D^{20} 1.4282. XII (88.3 g.) and 40 g. $ClCH_2CN$ were refluxed 4 hrs. in the oil bath at 165-70°.

and the mixt. was distd. as above, yielding 71 g. II, b_p 124-8°, n_D^{20} 1.4370. VI (15.9 g.) was added (stirring, $CaCl_2$ tube) to a mixt. of 100 ml. CaH_2 , 0.69 g. Na, and 167.2 g. X kept at 25° (ice-water cooling), the mixt. heated 2 hrs. at 65°, cooled, neutralized with AcOH, washed with water, $NaHCO_3$ soln., and again water, dried over Na_2SO_4 , the solvent removed, and the residue distd. in vacuo (procedure A), yielding the following fractions: Unchanged X (18 g.), b_p 74-86°, $(EtO)_2P(O)CH(CH_2CH_2CN)CO_2Et$ (35 g., b_p 100-20°, 33 g. after redistn., b_p 112-17°, n_D^{20} 1.4470, d_4^{20} 1.1463), and $(EtO)_2P(O)C(CH_2CH_2CN)CO_2Et$ (XIII) (19 g.), b_p 118-60°, X (67.2 g.) was added (stirring, $CaCl_2$ tube) to 100 ml. dry CaH_2 and 2.5 g. K (highly exothermic reaction), the mixt. cooled to room temp., and to it was added 31.8 g. VI at 45-50° (ice-water cooling), the mixt. then heated 3 hrs. at 60°, left 13 hrs. at room temp., and worked up as in A, yielding 68 g. XIII (procedure B), b_p 145-7°, n_D^{20} 1.4030, d_4^{20} 1.1461. X (50% excess) treated with VII by procedure A, yielding 57% $(EtO)_2P(O)CH(CH_2CH_2CO_2Me)CO_2Et$, b_p 93°, n_D^{20} 1.4448, d_4^{20} 1.1468. $(EtO)_2P(O)C(CH_2CH_2CO_2Me)CO_2Et$ was prepd. in 67% yield by procedure B, using 35% excess VII, b_p 128-0°, n_D^{20} 1.4568, d_4^{20} 1.1684. $(EtO)_2P(O)CH(CHMeCH_2CO_2Et)CO_2Et$ (XIV) was prepd. in 86% yield

from $\text{CH}_3\text{Me}:\text{CHCO}_2\text{Et}$, a stoichiometric amt. of K , and 20% excess X , using procedure A (negligible heat effect), $b.p.$ 98°, n_D^{20} 1.4458, d_4^{20} 1.1092. $(\text{EtO})_2\text{P}(\text{O})\text{CH}(\text{CHPh})\text{CH}_2\text{CO}_2\text{Et}$ prep'd. in 50% yield from X and V under the same conditions as XIV. $b.p.$ 138°, n_D^{20} 1.4678, d_4^{20} 1.1397. $(\text{EtO})_2\text{P}(\text{O})\text{CBu}(\text{CH}_2\text{CH}_2\text{CN})\text{CO}_2\text{Et}$ (XV) was prep'd. in 73% yield from XI and VI (procedure A), using 0.1 mole K per mole of XI, $b.p.$ 110-18°, n_D^{20} 1.4512, d_4^{20} 1.0631. $(\text{EtO})_2\text{P}(\text{O})\text{CBu}(\text{CH}_2\text{CH}_2\text{CO}_2\text{Me})\text{CO}_2\text{Et}$ was prep'd. in 73% yield from XI and VII, using procedure analogous to XV, $b.p.$ 117-19°, n_D^{20} 1.4526, d_4^{20} 1.0673. $(\text{EtO})_2\text{P}(\text{O})\text{C}(\text{CH}_2\text{CH}_2\text{CN})_2\text{CN}$ was prep'd. from II and VI (procedure B). The crude product after the removal of the solvent was crystd. from CCl_4 and ether, yield 80%; colorless needles, m. 73.5-1°, easily sol. in CH_2Cl_2 , alc., difficulty in water, and petr. ether.

Adam Spozynski

POLAND

PISZOR, Bernard, of the Department of Organic Chemistry, Institute of Technology (Katedra Chemii Organicznej, Politechnika, Lodz), in Lodz.

"Organophosphorus Compounds with an Active Methylene Group. Part V. Thermal Decomposition of Diethoxyphosphinylacetic Acid."

Warsaw, Roczniki Chemii, Vol 37, No 9, 1963, pp 949-954.

Abstract: [English article, author's summary modified] Investigation of thermal decomposition of diethoxyphosphinylacetic acid is described. It was found that the reaction follows two parallel directions, namely, decarboxylation and dealkylation. The latter is caused by the presence of carboxylic groups. No thermal decomposition of α -dihydroxyphosphinylglutaric and dibenzylphosphinylacetic acids occurs under similar conditions. Ten references, including 1 Polish, 2 Russian, and 7 Western.

1/1

FISZER, Bernard; KANSKI, Marek

Dimethylsulphoxide, its chemical properties and possibilities
of application in medicine and biology. Wlad. lek. 18 no.5:
459-461 1 Mr '65

1. Z Katedry Chemii Fizjologicznej i Ogolnej Wojskowej
Akademii Medycznej w Lodzi (Kierownik: doc. dr.med. M.Kanski).

FISZER, J.

Sewage treatment at Bassersdorf, Switzerland.

p. 391 (Gaz, Woda I Technika Sanitaren. Vol. 31, no. 10, Oct. 1957. Warszawa, Poland)

Monthly Index of East European Accessions (EEAI) LC. Vol. 7, no. 2,
February 1958

FISZER, J.

Sewage treatment at Winterthur, Switzerland.

p. 393 (Gaz, Woda i Technika Sanitarna. Vol. 31, No. 10, Oct. 1957. Warszawa, Poland)

Monthly Index of East European Accessions (EEAI) LC. Vol. 7, no. 2,
February 1958

FISZMR, J.

Sewage treatment in Uster, Switzerland.

p. 389 (Gaz, Woda I Technika Sanitaran. Vol. 31, no. 10, Oct. 1957. Warszawa, Poland)

Monthly Index of East European Accessions (EEAI) LC. Vol. 7, no. 2,
February 1958

FISZER, J.

Municipal and industrial sewage treatment. p. 224.

GAZ, WODA I TECHNIKA SANITARNA. (Stowarzyszenie Naukowo-Techniczne
Inzynierow i Technikow Sanitarnych, Ogrzewnictwa i Gazownictwa)
Warszawa, Poland, Vol. 32, no. 6, June 1958.

Monthly list of East European Accession (EEAI) LC, Vol. 9, no. 2, Feb. 1960

Uncl.

POLAND / Chemical Technology. Chemical Products and H-5
Their Application. Water Treatment. Sewage.

Abs Jour: Ref Zhur-Khimiya, No 23, 1958, 78129.

Author : Piszor, Jozef.

Inst : Not given.

Title : Project of Experimental Station at The Town of
Poznan for Purification of Sewage with Application
of Tower Biofilters.

Orig Pub: Gaz, woda i techn. sanit., 1958, 32, No 2, 54-56.

Abstract: No abstract.

Card 1/1

FISZER, Jozef, mgr inz.; LIBERADZKI, Boleslaw, mgr inz.

Supplying the population and industry with water in Hungary,
Gosp wodna 22 no.9:418-420 S '62.

FISZER, W.

"Economic exploitation of water contained in the reservoir of a water-power electric plant", p. 282, (WIADOMOSCI ELECTROTECHNICZNE, Vol. 14, No. 12, Dec. 1954, Warszawa, Poland)

SO: Monthly List of East Accessions, (EEAL), LC, Vol. 4, No. 5, May 1955, Uncl.

FISZER, W.

FISZER, W. The fight for reduction of costs in building electric-power plants
as an immediate requirement. p. 291.

Vol. 9, No. 6, Nov./Dec. 1955

ENERGETYKA

TECHNOLOGY

Warszawa, Poland

So: East European Accession, Vol. 5, No. 5, May 1956

FISZER, W.

FISZER, W. The economic advantages of prestressed-ferroconcete constructions in the light of the experiences of foreign industrial building p. 390

Vol. 13, No. 10, Oct. 1956
INZYNIERIA I BUDOWNICTWO
POLITICAL SCIENCE
Warszawa, Poland

So: East European Accession Vol. 4, No. 3, March 1957

FISZER, W.

FISZER, W. 5th International Conference on Electric Power in Vienna, June 17-23, 1956.
p. 277.

Vol. 16, No. 11, Nov. 1956.
WIADOMOSCI ELEKTROTECHNICZNE
TECHNOLOGY
Warszawa, Poland

So: East European ACcession, Vol. 6, No. 2, Feb. 1957

FISZER, W.

Training electric-power engineers at the National Correspondence Course organized by the Polish Electrical Engineers Association.

P. 51 (WIADOMOSCI ELEKTROTECHNICZNE) (Warszawa, Poland) V91. 17, no. 2, 1957

SO: Monthly Index of East European Accessions (EEAI) LC Vol. 7, No. 5. 1958

FISZER, W.

Consultations at the Electric-Power Engineering Section of the 3d Congress of the Polish Electrical Engineers Association.

P. 85 (WIADOMOSCI ELEKTROTECHNICZNE) (Warsaw, Poland) Vol. 17, no.4, Apr. 1957

SO: Monthly Index of East European Accessions (EEAI) LC Vol. 7, No. 5. 1958.

FISZER, W.; LASKOW, J.; STRASZEMSKI, K.

The 5th World Power Conference in Vienna. p. 1.

(ENERGETYKA. Vol. 11, No. 1, Jan./Feb. 1957. Warszawa, Poland)

SO: Monthly List of East European Accessions (EEAL) LC. Vol. 6, No. 10, October 1957. Uncl.

W. NISZKA.

11th Sectional Meeting of the World Power Conference in Belgrade, June 1957. p.169 .
(MIRNYETKA. Vol. 11, no. 4, July/Aug. 1957. Warszawa, Poland)

SO: Monthly List of East European Accessions (EEAI) LC. Vol.6, no. 12, Dec. 1957.
Uncl.

FISZER, W.

Industrial production of prestressed concrete elements in the Netherlands. p. 172.

(INZYNIERIA I BUDOWNICTWO, Vol 14, No. 4, Apr. 1957, Warszawa, Poland,)

SO: Monthly List of East European Accessions (EEAL) Lc. Vol. 6, No. 10, October 1957. Uncl.

FISZER, W.

"Energy as a factor in the economic development of underdeveloped countries;
from negotiations of the 11th Sectional Meeting of the World Power Con-
ference in Belgrade, in June 1957."

p. 221 (Wiadomosci Elektrotechniczne) Vol. 17, no. 9, Sept. 1957
Warsaw, Poland

SO: Monthly Index of East European Accessions (EEAI) LC. Vol. 7, no. 4,
April 1958

FISZER, Wacław (Magister Engineer)

Wacław FISZER, Magister Engineer, "Technical Progress in the Development of
Polish Power Engineering," Energetika, (Bytom) No 5, May 1958, pp 129-135.

JPRS/NY-L-480, 18 Nov 58.

FISZER, W.

Reorganization of the Central Commission of Electrotechnical Education. p. 123.

PRZEGŁAD ELEKTROTECHNICZNY. (Stowarzyszenie Elektryków Polskich)
Warszawa, Poland. Vol. 35, no. 3, Mar. 1959

Monthly list of East European Accession (EEAL) LC, Vol. 8, No. 7, July 1959

Uncl.

Fiszer, W.

Plans for further development of heating connected with electric-power production in Poland, by taking into consideration the current technical and economic conditions. p. 411

ENERGIA ES ATOMTECHNIKA. (Energiagazdalkodasi Tudomanyos Egyesulet)
Budapest, Hungary. Vol. 12, no. 7/8, July/August 1959

Monthly List of East European Accessions (EEAI) LC, Vol. 8, no.11
November 1959
Uncl.

~~FISZER~~ Wacław, mgr inż.

/

A discussion on parameters of steam for large turbogenerator systems
to be installed in Poland after 1965. Energetyka 14 no.12:354-355
D '60. (EEAI 10:5)
(Poland--Turbogenerators) (Poland--Steam)

FISZER, Wacław, mgr., inż.

Meeting of the Executive Council of the World Power Conference,
Moscow, July 21-22, 1961. Przegl elektrotechn 37 no.11:466 '61.

1. Członek Polskiego Komitetu Światowej Konferencji Energetycznej.

FISZER, Wacław, mgr inż.

Power engineering at the turning point between two five-year plans.
Energetyka Pol. 15 no.9:258-259 8 '62

FISZER, Wacław, mgr inż.

The Day of Power Engineering 1963. Energetyka Pol 17 no.8:
226-230 Ag '63.

FISZER, Wacław, mgr inż.

Concept of constructing a brown coal mine and a large power station in Belchatow. Przegl elektrotechn 39 no.12:457-460 D'63.

FISZER, Wacław, mgr inż.

Achievements of Polish power engineering in the recent 20 year
period and its development prospects. Energetyka Pol 18 no. 7:
193-197 J1 '64.

FISZER, Wacław, mgr inż.

Development of power engineering in India. Przegl techn 86
no.22:2,4 '65.

Food Technology

POLAND

PEZACKI, W. and FISZER, W., of the Chair of Meat Technology, Higher School of Agriculture (Katedra Technologii Miesza WSR), Poznan. Prof. Dr. W. Pezacki, Head.

"An Attempt at Evaluating the Principal Transformation Products of 1,6-¹⁴C Glucose in Raw Smoked Meat"

Lublin, Medycyna Weterynaryjna, Vol 22, No 8, 1966, pp 488-495.

Abstract: The transformation products of labeled 1,9-¹⁴C glucose in raw smoked meats were studied in four series comprising 32 samples each during 6 production days and 60 post-production storage days. Radioactivity of CO₂ combined in Ba¹⁴CO₃ after evolution from the meat was then determined. It was determined that fermentation of glucose in raw smoked meats is of the hetero type, and that it takes place only during production. Contains 6 tables and 15 references (6 Polish, 4 Western, 1 Russian and 4 German-language).

1/1

FISZMAN, Michal, mgr

Role of the technical press in the modernization of the
teaching procedures in occupational schools. Przegl techn
85 no. 43:1,11 25 0 '64.

1. Central Office of Educational Methods, Ministry of
Education, Warsaw.

ACC NR: AM7004071

Mongraph

UR/

Kovalenko, Boris Mikhaylovich; Fit, Eduard Aleksandrovich

Digital equipment for automating the petroleum industry (Tsifrovyye ustroystva dlya avtomatizatsii neftyanoy promyshlennosti) Moscow, Izd-vo "Nedra", 66. 0266 p. illus., biblio. 1,900 copies printed

TOPIC TAGS: analog digital conversion, digital system, petroleum industry, logic element, automation

PURPOSE AND COVERAGE: The book discusses the elements and devices of digital engineering, and the methods of converting continuous values into discrete values and vice versa, and presents the principles of coding. Special codes which eliminate errors in the conversion of continuous values into discrete values, and the algorithms and circuits used in data processing in relation to specific matters pertaining to the petroleum and petrochemical industries are reviewed. The potentialities of digital devices shown by specific examples. Simplified algorithms and processing systems for digital data are presented. The book is intended for engineering and technical personnel dealing with problems of application of digital engineering in the petroleum and petro-

Card 1/2

UDC: 622.32:682.142.32.002.5

ACC NR: AM7004071

chemical industry, and may be useful to students attending courses in automation and digital and measuring engineering at Schools of Higher Education of Petroleum Processing. The authors express their gratitude to L. B. Kublanovskiy, Candidate of Technical Sciences, for reviewing the book and for his advice.

TABLE OF CONTENT [abridged]:

Foreword -- 3

- Ch. 1. Conversion of analog into digital values, and vice versa -- 5
- Ch. 2. Logical elements and units of digital engineering -- 64
- Ch. 3. Basic circuits and devices used in converters -- 121
- Ch. 4. Digital presentation, printing of results, and punched output -- 148
- Ch. 5. Digital systems and devices -- 167

Literature -- 263

SUB CODE: 09/ SUBM DATE: 28Apr66/ ORIG REF: 036/ OTH REF: 006

Card 2/2

FITAK, Bohdan; BOZYK, Zbigniew

Accuracy of Gerber's method of fat determination in cottage cheese and processed cheeses with the Van Gulik butyrometer. Chem anal 8 no.2:233-238 '63.

1. Department of Food Investigation, Academy of Medicine, Warsaw.
Head of Department: prof. dr S. Krauze.

FITALEV, V.N.

Changing the design of brick facing of porthole damstones of shaft-
type impact mills TP-230 boilers. Suggested by V.N. Fitalev.
Rats. predl. no. 44:6-7 '59. (MIRA 14:1)
(Boilers)

FITALEV, V.N.

Making fire-clay concrete blocks for lining explosion valves and inspection holes. Suggested by V.N. Fitalev. Rats. predl. no. 44:7-8 '59.

(MIRA 14:1)

(Boilers) (Fire clay)

1-14886, 11.

MINI/Pharmacology. Toxicology. Chemotherapeutic Preparations
A) Antibiotics

Abstr Jour : Ref Zhur - Biol., No II, 1958, No 3206

Author : Basila V.T., Pop O., Vasilescu I., Cravacevski V., Popian R., Pitrean A.

Inst : -

Title : The Dynamics of Immunological Indices in Patients with Typhoid Fever, Treated with Chloramphenicol.

Orig Pub : Rev. microbiol., parasitol., et epidemiol., 1956, 1, No 1, 33-42

Abstract : Results of observation of 34 patients with typhoid fever were described; the dynamics of agglutinins anti-O, H, Vi, and blood changes associated with chloramphenicol therapy (I) were studied. It was established that in I therapy the agglutinins anti-O have a lower titer or disappear completely. Later therapy with I has no effect on the appearance and dynamics of agglutinins. Agglutinins anti-Vi appear in 91 percent of the patients; in 5.6 percent of the

Card : 1/2

cases during the first 2 weeks, in 24.4 percent of the cases - during the fourth week; in the remaining cases - between the second and fifth months. Decrease of anti-Vi agglutinins among patients with relapse was observed before the relapse in 76.5 percent of the cases; a decrease of their titer or their disappearance - in 11.1 percent of the cases. The appearance of eosinophiles and a lymphocytic reaction accompanied the appearance of anti-Vi agglutinins, or followed it directly. Thus - the post-infection immunity takes place also after I therapy, but it is established later. Vaccination with triple vaccine is useful for prevention of relapses and acceleration of immunity.--E.M. Sharybasov.

Card : 2/2

BUSILA, V.T.; POP, O.; VASILESCU, I.; TOPCIU, VI.; POPIAN, R.; CUCURUZ, I.;
ALEXANDRESCU, R.; ISACSON, I.; SON, C.; CRAVEVSCHI, V.; ZILBERMAN, L.;
FITARAU, A.; JICMAN, M.

Clinical study of leptospirosis. Stud. cercet. inframicrobiol., Bucur.
8 no.2:259-280 1957.

1. Comunicare prezentata la Institutul de inframicrobiologie al
Academiei R.P.R. in sedinta din 5 martie 1956.

(LEPTOSPIROSIS

pathol. & epidemiol. of *L. pomona*, *L. canicola* & other
leptospiral infect. in Rumania, case reports & review)

BASILA, V.T., prof.; VASILESCU, I.; FITARĂU, A.; CIOFLEC, D.

Serious staphylococcal septicemia with cavernous sinus thrombosis and
bullous pneumonopathy. Microbiologia (Bucur) 6 no.1:25 Ja-F '61.

1. Clinica de boli contagioase, Timisoara.

BUSILA, V. T., prof.; VASILESCU, I., dr.; CUCUTUZ, L., dr.; ALEXANDRESCU, R., dr.;
POPIAN, R., dr.; FITARAU, A., dr.; PLACINTA, A., dr.; STAMBOLIU, D. W., dr.;
BACALOGU, D., dr.; PANA, G., dr.; NOVACOVICI, O., dr.; COTLEAREVSCHI, V.,
dr.; COTLEAREVSCHI, E., dr.

Clinical and biological characteristics of a focus of trichinosis.
Med. intern., Bucur 13 no.2:227-236 F '61.

1. Clinica de boli contagioase, Timisoara (for Bacaloglu). 2. Spitalul
si Sanepidul Orsova (for Cotlearevschi).

(TRICHINOSIS)

S

RUMANIA/Human and Animal Morphology - The Skeleton.

Abs Jour

: Ref Zhur Biol., No 5, 1959, 21530

Author

: Corondan, Gh., Kun. Gh., Fitarau, V., Rottenberg, N., Birzu, St., Elias, St., Floreanu, M.

Inst Title

: Investigation of Tinctorial Reactions of the Fibrillar Bone Structure

Orig Pub

: Morfol. normala si patol., 1958, 3, No 1, 61-68

Abstract

: It has been shown in bone preparations decalcified with strong HNO_3 containing formalin that the principal fibrillar network is stained with aniline blue (Mallory), is demonstrated by the Halle reaction, is not impregnated with silver, and is isotropic. Certain fibrillar lamellae give reactions of the basic type; others are fuchsinophilic, notably argentophilic, and are very weakly demonstrated by the Halle reaction, and are double refractile. The authors

- 19--

Card 2,

Card 1/2

TUDORAN, P., ing.; RADU, A., ing.; FITERAU, Victoria, ing.

Increasing the splintering capacity of woodprocessing tools.
by cyaniding treatment. Ind lemnului 15 no.6/7:231-236 Je-Jl
'64.

FITERMAN, Ya. F.; GRANOVSKIY, S.A., redaktor; VORONETSKAYA, L.V.,
tekhnicheskiy redaktor.

[Assembling and repair of hydraulic turbines] Montazh i remont
gidroturbin. Leningrad, Gos.energeticheskoe izd-vo, 1952. 462 p.
(Hydraulic turbines) (MIRA 8:3)

FITERMAN, YA. F., BARKOV, N. K. and N.A. POPOV

Eksplotatsiia gidroagregatov. Leningrad, Gosenergoizdat, 1949. 260 p. illus.

Bibliography: p. 260.

9 rubles 40 Kopeks

Operation of hydraulic units.

DLC: TJ870.B3

SO: Manufacturing and Mechanical Engineering in the Soviet Union, Library of Congress, 1953.

SO: W-14151 11 Oct 1950

GONCHAROV, A.N., inzhener [reviewer]; FITERMAN, Ya.F. [author].

"Installing and repairing hydro-turbines." IA.F.Fiterman. Reviewed by A.N.
Goncharov. Elek.sta. 24 no.11:61-62 N '53. (MIRA 6:11)
(Water wheels) (Fiterman, IA.F.)

FITERMAN, Yakov Filippovich; BARKOV, N.K., red.; ZHITNIKOVA, O.S.,
tekhn. red.

[Assembly and maintenance of hydraulic turbines] Montazh i
remont gidroturbin. Izd.2., perer. i dop. Moskva, Gos. energ.
izd-vo, 1961. 553 p. (MIRA 15:3)
(Hydraulic turbines—Maintenance and repair)
(Hydroelectric power stations)

FITEYEV, A.S.

Special enlarged session of the Scientific Council of the All-Union Scientific Research Institute for Shale Processing devoted to the problem of shale gas retorts. Trudy VNIIPS no.6:328-333 '58. (MIRA 11:8)

(Gas retorts--Congresses) (Oil shales)

~~FITI, M.~~ FITI, M.

Distr: 4E3c 2 cys

✓ The analysis by radio-activation of hafnium and some rare earths from a mining product containing zircon. Maria Filj and Constanta Mantescu (Inst. Al. Phys., Bucharest, Romania). *Acad. rep. populare Romine, Studii cercetari chim.* 7, 305-73(1959).—Using the method of radio-activation of a mineral product of zircon, results were obtained in a simple way in cases where classical methods could not be used. The usual method for the detn. of Hf by radio-activation, measuring the activity of the isotopes Hf^{157} or Hf^{158} , was modified by measuring the activity of the Hf^{156} , which can be easily sepd. from the activity of Zr^{90} , from the disintegration curve. By the radio-activation method, although the object was not the analysis of ultramicro quantities of the elements (10^{-10} , $10^{-11}\%$), the Hf content (without the sepn. of Zr) and small amts. of rare earths were detd.

T. Demas

4
2

zcu

Rup

BADANOIU, M.; FITI, M.; MANTESCU, C.

Analysis of the chemically pure silicon by radioactivation. Studii
cerc chim 7 no.4:573-579 '59. (ZEAI 9:7)

1. Institutul de fizica atomica al Academiei R.P.R., Bucuresti.
(Semiconductors) (Silicon) (Radioisotopes)

FITI, M.; MANTESCU, C.; COSTEA, T.

Determination of boron in ores through the registration of particles
in the reaction $B^{10}(n, \alpha) Li^7$. Studii cerc fiz 11 no.2:423-430 '60.

(Ores) (Boron) (Lithium) (Neutrons)
(Nuclear counters) (Alpha rays)

(EEAI 10:1)

MANTESCU, D.; FITI, M.

Measuring tritium and carbon-14 in the gaseous state. Studii cerc
fiz 11 no.3:788-798 '60. (EEAI 10:2)
(Tritium) (Carbon) (Radioisotopes)
(Counters (Electrons, ions, etc.) (Gases)

S/081/62/000/023/012/120
B149/B186

AUTHOR: Fiti, Maria

TITLE: Study of the nature of active surfaces of solid catalysts.
I. Active surface of Cr_2O_3 and NiO according to radiochemical data

PERIODICAL: Referativnyy zhurnal. Khimiya, no. 23, 1962, 86, abstract 23B629 (Studii și cecetări fiz. Acad. RPR, v. 12, no. 2, 1961, 357 - 369 [Rum.; summaries in Russ. and French])

TEXT: The properties of the active surface of Cr_2O_3 and NiO were studied by chemisorption of CO_2 , by the course of isotope exchange $\text{C}^{14}\text{O}_2(\text{ads.}) + \text{CO}_2(\text{gas}) \rightleftharpoons \text{C}^{14}\text{O}_2(\text{gas}) + \text{CO}_2(\text{ads.})$, and by the differential isotope method. The changes in the active surface of these catalysts under the action of Co^{60} γ -radiation were investigated. [Abstracter's note: Complete translation.] ✓

Card 1/1

FITI, Maria; GAINAR, I.; GHERGHESCU, Ileana; GIRD, E.

Possibility of applying ion exchangers in the catalytic reaction of acetylene hydration. Studii cerc chimie 10 no.2:243-249 '62.

1. Institutul de fizica atomica, Bucuresti.

FITI, Maria

Radiolysis of acetylene in solution. Pt.1. Rev chimie Roum
9 no.6//7451-461 Je-Jl '64

1. Laboratory of Radiochemistry, Institute of Atomic Physics,
P.O. Box 35.

FITI, M.

Radiolysis of acetylene in solution. Pt.1. Studii cerc chim
13 no.6/7:459-468 Je-Jl '64

1. Laboratory of Radiochemistry, Institute of Atomic Physics,
P.O. Box 35.

Fitilov, S. Ya.

28(2)

PHASE I BOOK EXPLOITATION

SOV/2146

Leningrad. Universitet

Materialy po mashinnomu perevodu; sbornik 1 (Materials on Machine Translation; Collection of Articles Nr 1) Leningrad, Izd-vo Leningr univ., 1958. 228 p. 1,000 copies printed.

No contributors mentioned.

PURPOSE: The book is for students, scientists, and engineers interested in machine translation.

COVERAGE: This collection of 15 articles is published as volume I of the Materials on Machine Translation. It represents the work of 25 Soviet scientists at the Leningrad University Experimental Laboratory for Machine Translation which was created in March 1958 to continue research on translating with the aid of electronic machines. Although the present volume deals with both the theoretical and the practical aspect of machine translating, the emphasis is on the compilation of algorithms for a number of lan-

Card 1/4

Materials on Machine Translation (Cont.)

SOV/2146

guages, many of them Asiatic. There are no references.

TABLE OF CONTENTS:

Introduction	2
Steblyn-Kamenskiy, M.I. Significance of Machine Translation for Linguistics	3
Ivanov, V.V. Linguistic Problem of Creating the Machine Language for Information Machines	10
Andreyev, N.D. Meta-language in Mechanical Translations and its Use	40
Bratchikov, I.L., S.Ya. Fitialov, and G.S. Tseytin. Dictionary Structure and Information Coding in Machine Translation	61
Andreyev, N.D., B.P. Golovanov, L.I. Ivanov, and A.K. Ogloblin. Stem-separating Program for Indonesian Algorithms in Machine Translation	88
Card 2/4	

Materials on Machine Translation (Cont.)

SOV/2146

- Berkov, V.P., and M.P. Cherkasova. Work on Norwegian-Russian Algorithms in Machine Translation 98
- Frolova, O.B., and V.I. Strelkova. Initial Stage of Work on Arabic-Russian Algorithms in Machine Translation 112
- Andreyev, N. D., Ye.A. Zapadova, and O.A. Timofeyeva. Certain Problems of the Formation of Burmese-Russian Algorithms in Machine Translation 126
- Zasorina, L.N., N.B. Karachan, S.N. Medvedeva, and G.S. Tseytin. Proposed Program for a Morphological Analysis of the Russian Language in Machine Translation 136
- Katenina, T.Ye. Work on Hindustani (Hindi) Russian Algorithms in Machine Translation 191
- Andreyev, N.D., D.A. Batova, V.S. Panfilov, and V.M. Petrova. Elements of an Independent Analysis of Vietnamese-Russian Algorithms 191
- Card 3/4

Materials on Machine Translation (Cont.)	SOV/2146
gorithms in Machine Translation	199
Babinstsev, A.A., and Yu.P. Semenishchev. Machine Translation of Japanese Into Russian	209
Leykina, B.M. First Stage of an Independent Structural Analysis of Simple Sentences in the English Language	216
Andreyev, N.D. Principles of the Construction of Electronic Reading Machines	223
AVAILABLE: Library of Congress	

Card 4/4

TM/bg
9-15-59

FITIALOV, S.Ya.

Language for nonalgebraic algorithms. NTI no.4:30-34 '63.
(MIRA 16:10)

FITILEV, B.V.; RUTES, V.S.

Widespread introduction of the continuous pouring of steel is a
work of great economic significance. Stal' 23 no.9:769-772 S
'63. (MIRA 16:10)

OTKUPSHCHIKOVA, M.I.; FITIALOV, S.Ya.

System of morphological synthesis of the Russian language. NTI
no.1:39-46 '64. (MIRA 17:3)

WT(d)/RY7/SED-2/WT(1) Fo-L/Fq-L/Fg-L/Fk-L
TRA WT(d)/SED(dp) EF/33
ACCESSION NR: AP4049560 S/0315/64/000451/0004/0046

AUTHOR: Otkupshchikova, M. I.; Fitialov, S. Ya.

TITLE: A system of morphological synthesis for the Russian language

SOURCE: Nauchno-tekhnicheskaya informatsiya, no. 1, 1964, 39-46

TOPIC TAGS: algorithm, machine translation, morphological synthesis, linguistics

ABSTRACT: The paper considers a morphological synthesis for the Russian language. In machine translation of English into Russian, the Russian language must take into account the morphological structure of words as well as the linear arrangement of words in a text. The morphological structure of the alphabetical word form is described. A method is proposed for making such a synthesis. It is shown that a morphological machine dictionary, used in machine translation, and basically allows determination of the word in its dictionary to which a text refers, as well as determination of the correct word form in context. The present paper describes a computer program for implementing the morphological synthesis.

ASSOCIATION: none

Card 1/2

L 20095-65

ACCESSION NR: AP4949560

SUBMITTED: 01Aug63

ENCL: 00

SUB CODE: 0P

NO REF SOV: 000

OTHER: 000

Card 2/2

EWI(d)/BIT/EED-2/EWP(1) Pk-1/Pk-1/Pk-1/Pk-1

MISSION NR: AP5000881

S:0015 61 000 007/0030/0036

AUTHOR: Fitalov, S. Ya.

TITLE: Two types of calculation

73

SOURCE: Nauchno-tehnicheskaya informatsiya, no. 7, 1964, 30-36

TOPIC TAGS: machine translation, phrase structure, grammar, language structure, linguistics, calculus theory 166

ABSTRACT: Two classes of grammatical calculations are studied: direct calculation of the components used in machine translation, and so-called parenthetical calculations. It is shown that for any phrase structure grammar there exists an equivalent parenthetical grammar. The equivalence is proved for certain types of languages associated with phrase structure grammars. The components are presented in the form of a grammar. The results are in the form of a determinate form. The results are in the form of a determinate form. The work done by N. Kromskiy and deals with an essential part of the interpretation of the calculation with a certain type of grammar. The following theorem is proved: The following theorem is proved: The following theorem is proved: over type P; II Type C is not equivalent to type P; III Class P-calculations and simple

Card 1/2

L 22528-65

ACCESSION NR: AP6000881

C-calculations are equivalent. Orig. art. has: numerous formulas.

ASSOCIATION: none

Card 2/2

L 12906-66 EWT(d)/BXT/T/ENP(1) IJP(c) BB/GG

ACC NR: AR5023490

SOURCE CODE: UR/0372/65/000/001/VO47/VO47

SOURCE: Ref. zh. Kibernetika, Abs. 7V340

AUTHOR: ⁴⁴Fitialov, S. Ya.

13
B

TITLE: Transformation in axiomatic grammars

CITED SOURCE: Sb. Transformats. metod v strukturn. lingvist. M., Nauka, 1964, 3-11

TOPIC TAGS: cybernetics, machine translation, computer, linguistics

TRANSLATION: A classification of language models is proposed and the question on the place of transformations in various types of models is investigated. Three types of models are proposed for the study: 1) models of a concrete language^{66,47} process; 2) models for studying theories of grammatical classes for concrete or intuitively understood models of type (1); 3) models for generating and studying sets of models of type (2). Under such classification the models of M. Khomskiy (RZhMat, 1959, 9578) are related to type (2), and the model proposed by O. S. Kulagina (Problemy kibernetiki, 1, pp. 203-214, M. Fizmatgiz, 1958) is related to type (3). It is noted that the author is not aware of any sufficiently complete models of type (1) for natural languages. Emphasis is placed on the necessity for distinguishing between concrete models of a language and formal computations defining classes of grammatical models. Ye. Stotskaya

SUB CODE: 09/
Card 1/1 HUN

UDC: 801:51

FITILEV, B.V.; GUBERT, S.V.; OSIPOV, A.I.

Prospects for expanding the continuous casting of steel. Stal'
23 no.10:889-892 0 '63. (MIRA 16:11)

1. Gosudarstvennyy komitet po chernoy i tsvetnoy metallurgii pri
Gosplane SSSR, Gosudarstvennyy soyuznyy institut po proyektiro-
vaniyu metallurgicheskikh zavodov i Tsentral'nyy nauchno-issledo-
vatel'skiy institut chernoy metallurgii.

ФИТИЛЕВА, Л. М.

Fitileva, L. M. -- "Influence of a Therapeutic Diet on the Functional State of the Kidneys in Patients with Hypertensive Disease." Second Moscow State Med Inst imeni I. V. Stalin, Moscow, 1955 (Dissertation for the Degree of Candidate of Veterinary Sciences)

SO: Knizhnaya Letopis', No. 24, Moscow, Jun 55, pp 91-104

GEL'SHEYN, G.G. (Moskva, Leninskiy prospekt, 8, kv. 18); FITILEVA, L.M.

Some auscultative and phonocardiographic data in mitral stenosis.
Grud.khir. 1 no.1:31-41 Ja-F '59. (MIRA 13:6)

1. Iz laboratorii elektrokardiografii i fonokardiografii Instituta grudnoy khirurgii AMN SSSR (dir. - prof. A.A. Busalov, nauchnyy rukovoditel' - akad. A.N. Bakulev).
(MITRAL VALVE--DISEASES)

GEL'SHTEYN, G.G.; FITILEVA, L.M. (Moscow)

Some auscultative and phonocardiographic data in mitral stenosis.
Terap.arkh. 31 no.4:55-62 Ap '59. (MIRA 14:5)

1. Iz laboratorii elektrokardiografii Instituta grudnoy khirurgii
AMN SSSR (dir. - akademik A.N.Bakulev).
(MITRAL VALVE—DISEASES) (HEART—SOUNDS)